

## Leavenworth County

### Estimated Economic Contribution of Agriculture, Food, and Food Processing Sectors 6/27/2019

Using the most recent IMPLAN data available (2017) adjusted for 2019, 21 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Leavenworth County economy.<sup>1</sup>

These 21 sectors have a total direct output of approximately **\$145.5 million** and support **1,915 jobs** in Leavenworth County. Running the model for all 21 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Leavenworth County Economy					
Contribution Type <sup>2</sup>	Employment	% Employment	Total Value Added <sup>3</sup>	Total Value Added % of Gross Regional Product <sup>4</sup>	Output <sup>5</sup>
<b>Direct Effect</b>	1915.4	5.11%	\$58,796,418	1.81%	\$145,481,393
<b>Indirect Effect</b>	101.9	0.27%	\$7,483,156	0.23%	\$14,846,868
<b>Induced Effect</b>	106.2	0.28%	\$6,785,145	0.21%	\$13,478,970
<b>Total Effect</b>	2123.5	5.67%	\$73,064,719	2.25%	\$173,807,232

As shown in the above table, agriculture, food, and food processing sectors support **2,124 jobs**, or **5.67%** of the entire workforce in the county.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 21 agriculture, food, and food processing sectors is approximately **\$73.1 million**, or **2.25% of the GRP**.

The following tables document the top industries affected by employment and output, as well as a listing of all industries that were analyzed.

<sup>1</sup> Article on building a contribution analysis in IMPLAN that avoids double counting:

<https://implanhelp.zendesk.com/hc/en-us/articles/115002801513-Considerations-of-Contribution-Analysis>

<sup>2</sup> Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

<sup>3</sup> Value added = labor income + indirect business taxes + other property type income.

<sup>4</sup> GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

<sup>5</sup> Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector is the top employer with **703 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Leavenworth County.

Top Ten Agriculture, Food, and Food Processing Sectors by Employment		
Sector	Total Employment	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	703.3	\$21,073,328
Landscape and horticultural services	305.2	\$16,102,526
Support activities for agriculture and forestry	222.8	\$6,368,323
All other food manufacturing	109.9	\$38,642,765
All other crop farming	95.4	\$1,992,953
Veterinary services	90.7	\$9,717,126
Bread and bakery product, except frozen, manufacturing	83.2	\$12,122,701
Grain farming	65.4	\$6,350,169
Oilseed farming	58.9	\$16,673,050
Greenhouse, nursery, and floriculture production	52.0	\$4,489,148

The all other food manufacturing sector directly contributes approximately **\$38.6 million** to the Leavenworth County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Agriculture, Food, and Food Processing Sectors by Output		
Sector	Total Employment	Total Output
All other food manufacturing	109.9	\$38,642,765
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	703.3	\$21,073,328
Oilseed farming	58.9	\$16,673,050
Landscape and horticultural services	305.2	\$16,102,526
Bread and bakery product, except frozen, manufacturing	83.2	\$12,122,701
Veterinary services	90.7	\$9,717,126
Support activities for agriculture and forestry	222.8	\$6,368,323
Grain farming	65.4	\$6,350,169
Greenhouse, nursery, and floriculture production	52.0	\$4,489,148
All other industrial machinery manufacturing	19.7	\$4,268,130

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Leavenworth County economy.

<b>All Agriculture, Food, and Food Processing Sectors</b>		
<b>Sector</b>	<b>Total Employment</b>	<b>Total Output</b>
Oilseed farming	58.9	\$16,673,049.93
Grain farming	65.4	\$6,350,169.18
Vegetable and melon farming	4.7	\$483,736.99
Fruit farming	9.1	\$434,866.91
Tree nut farming	9.9	\$659,499.35
Greenhouse, nursery, and floriculture production	52.0	\$4,489,148.14
All other crop farming	95.4	\$1,992,952.82
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	703.3	\$21,073,328.02
Dairy cattle and milk production	13.5	\$2,683,866.98
Poultry and egg production	2.4	\$803,056.00
Animal production, except cattle and poultry and eggs	48.0	\$1,677,903.18
Commercial logging	8.3	\$219,898.78
Commercial hunting and trapping	8.0	\$157,655.67
Support activities for agriculture and forestry	222.8	\$6,368,323.33
Bread and bakery product, except frozen, manufacturing	83.2	\$12,122,700.69
Frozen cakes and other pastries manufacturing	1.8	\$278,401.02
All other food manufacturing	109.9	\$38,642,765.05
Other leather and allied product manufacturing	3.3	\$282,289.21
All other industrial machinery manufacturing	19.7	\$4,268,129.35
Veterinary services	90.7	\$9,717,125.89
Landscape and horticultural services	305.2	\$16,102,525.71

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Leavenworth County, the retail sector was omitted.